Date and G.M.T.				Position-angle.			Distance.		
				Observed.	Tabular.	T−O.	Observed.	Tabular.	T−O.
1905.	d	h m s		°	°	°	″	″	″
Mar.	27	7 48	11	281·98	282·60	+0·62	15·78	15·71	− ·07
	27	8 21	49	280·98	281·60	+0·62	15·91	15·79	− ·12
Apr.	6	8 11	8	47·09	48·30	+1·21	13·10	13·04	− ·06
	12	9 16	18	36·43	36·96	+0·53	12·00	12·01	+ ·01
	12	9 41	23	35·72	35·68	−0·04	11·95	11·92	− ·03
	15	9 20	56	212·30	212·11	−0·19	11·19	11·65	+ ·46

Observations of Jupiter's Sixth and Seventh Satellites from Photographs taken with the 30-inch Reflector of the Thompson Equatorial at the Royal Observatory, Greenwich.

(*Communicated by the Astronomer Royal.*)

The photographs were taken by Mr. Melotte, Mr. Davidson, or Mr. Edney. The measures of distance and position-angle from *Jupiter* are to be considered as merely provisional pending more complete measurements by the help of reference stars. The over-exposed image of *Jupiter* gave a reversed image in its centre suitable for measurement.

For more accurate measurement it is proposed to find the positions of the satellite in each case relatively to three or four faint comparison stars round it—the positions of these comparison stars relatively to 9 mag. reference stars being obtained from photographs with the Astrographic telescope, where the field sensibly free from distortion is much larger. The position of *Jupiter* will be determined from similar photographs with shorter exposures, the same stars being used as reference stars.

The provisional measures given below are not corrected for refraction and aberration. A comparison is given with Mr. F. E. Ross's Ephemerides, *A.N.* 4042 and L.O.B. No. 82.

Observations of Jupiter and Satellite VI.

Plate No.	Date.	G.M.T.	*p.*	*s.*	Tab.−Obs. *p.*	Tab.−Obs. *s.*	Exposure.
	1905.	h m	° ′	′ ″	°	′	m
2028	Aug. 23	13 30	311 9	25 30	...	...	30
2029	23	14 23	310 45	25 33	...	...	31
2038	Sept. 3	15 17	290 51	36 59	+4·8	− 0·5	40
2047	7	13 26	286 54	40 52	3·9	1·0	60
2048	7	15 32	286 48	40 54	4·0	1·0	55
2050	8	12 56	285 54	41 43	3·7	0·9	30
2054	12	14 37	281 29	45 16	4·0	1·5	20
2055	12	15 5	281 26	45 17	+4·0	−1·5	20

Plate No.	Date. 1905.	G.M.T. h m	*p.* ° ′	*s.* ′ ″	Tab.—Obs. *p.* °	*s.* ′	Exposure. m
2056	Sept. 12	15 42	281 32	45 17	+4·0	− 1·5	30
2068	30	12 17	267 34	54 53	3·2	0·6	60
2070	Oct. 4	12 25	264 51	55 29	2·8	0·5	40
2072	4	16 38	264 41	55 31	2·9	0·5	39
2074	5	11 52	264 3	55 33	2·7	0·5	30
2075	5	13 7	264 10	55 34	2 6	0·6	59
2077	6	11 16	263 34	55 34	2·4	− 0·6	26
2079	21	10 55	251 38	51 54	1·9	+ 0·1	45
2080	21	11 54	251 37	51 53	1·9	0·1	45
2081	22	10 46	250 40	51 24	1·8	0·2	40
2082	22	12 4	250 44	51 24	1·8	0·2	75
2086	25	10 47	248 0	49 47	1·5	0·3	30
2087	25	11 47	248 0	49 45	1·5	0·3	60
2089	27	10 17	246 10	48 34	1·3	0·3	40
	27	10 58	246 10	48 33	1·3	0·3	29
2091	29	9 47	244 11	47 19	1·3	0·3	30
2092	29	10 20	244 8	47 16	1·3	0·3	25
2093	29	12 19	244 1	47 16	1·3	0·3	177
2094	29	14 17	243 59	47 9	1·3	0·3	17
2096	31	10 24	241 42	45 54	1·3	0·1	25
	31	10 48	241 42	45 54	1·3	0·1	20
2097	31	12 4	241 31	45 51	1·3	+ 0·1	84
2098	Nov. 3	9 49	238 9	43 46	1·3	− 0·2	30
2100	3	11 45	237 58	43 43	1·3	0·1	54
2104	6	10 19	233 51	41 32	1·2	0·3	15
2105	6	10 48	233 50	41 31	1·2	0·3	15
2106	6	11 50	233 53	41 27	1·2	0·3	70
2110	7	14 12	232 19	40 38	1·4	0·3	15
2111	7	15 14	232 9	40 33	+1·3	− 0·3	90

Observations of Jupiter and Satellite VII.

Plate No.	Date 1905.	G.M.T. h m	*p.* ° ′	″	Tab.—Obs. *p.* °	*s.* ′	Exposure m
2082	Oct. 22	12 4	286 15	41 55	+1·0	+ 5·6	75
2093	29	12 19	286 29	31 44	0·3	7·6	177
2094	29	14 17	286 30	31 32	+0·3	7·6	17
2097	31	12 4	286 30	28 25	−0·5	8·1	84
2100	Nov. 3	11 45	286 47	23 21	1·9	8·9	54
2106	6	11 50	287 15	18 4	3·0	10·0	70
2111	7	15 14	287 46	15 54	−3·7	+10·8	90

Observations of Phenomena of Jupiter's Satellites at Windsor, New South Wales, in the years 1900 *and* 1902. By John Tebbutt.

Day of Observation.	Satellite.	Phenomenon.	Phase.	Mag. Power.	G.M.T. of Observation. h m s	Mean Time of *Nautical Almanac*. h m s
1900. June 30	I.	Tr. Egr.	Int. contact	168	21 26 29	
30	I.	,,	Bisection	,,	21 28 39	21 31
30	I.	,,	Ext. contact	,,	21 30 54	
July 1	I.	Ecl. R.	First seen	74	19 32 48	19 33 17
1	I.	,,	Full brightness	,,	19 35 42	
13	III.	,,	First seen	,,	20 48 24	20 49 29
13	II.	Tr. Ingr.	Ext. contact	168	22 2 22	
13	II.	,,	Bisection	,,	22 4 47	21 58
13	II.	,,	Int. contact	,,	22 7 7	
15	I.	Occ. D.	First contact	,,	20 9 2	
15	I.	,,	Bisection	,,	20 11 7	20 10
15	I.	,,	Last seen	,,	20 12 52	
15	I.	Ecl. R.	First seen	74	23 21 39	23 22 24
15	I.	,,	Full brightness	,,	23 25 14	
Sept. 17	II.	,,	First seen	,,	20 34 4	20 37 2
17	II.	,,	Full brightness	,,	20 38 59	
Oct. 1	I.	,,	First seen	,,	20 24 35	20 25 5
1	I.	,,	Full brightness	,,	20 28 9	
1902. Sept. 14	IV.	Occ. D.	First contact	168	23 9 39	
14	IV.	,,	Bisection	,,	23 13 38	23 21
14	IV.	,,	Last seen	,,	23 17 33	
14	I.	,,	First contact	,,	23 14 8	
14	I.	,,	Bisection	,,	23 15 53	23 16 0
14	I.	,,	Last seen	,,	23 18 22	
16	I.	Ecl. R.	First seen	74	20 58 30	20 58 50
16	I.	,,	Full brightness	,,	21 0 18	
19	II.	,,	First seen	,,	23 47 21	23 48 7
19	II.	,,	Full brightness	,,	23 50 23	
30	I.	Occ. D.	First contact	138	21 19 49	
30	I.	,,	Bisection	,,	21 22 9	21 22
30	I.	,,	Last seen	,,	21 23 58	
Oct. 4	III.	Tr. Ingr.	Ext. contact	,,	22 18 1	
4	III.	,,	Bisection	,,	22 21 40	22 20
4	III.	,,	Int. contact	,,	22 25 29	
5	II	Tr. Egr.	Int. contact	,,	21 41 0	